AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-40. (cancelled)

41. (previously amended) A method for treating cancer comprising administering to a mammal, an effective cancer-treating amount of:

i) at least one vector comprising a polynucleotide encoding a polypeptide having a P450 activity of converting acetaminophen to a cytotoxic molecule, wherein the expression of the polynucleotide is controlled by a promoter, or an effective part thereof, and

ii) acetaminophen.

42. (previously presented) A method according to claim 41, wherein said mammal is human.

43. (previously presented) A method according to claim 41, wherein said vector is a eukaryotic expression vector.

44. (previously amended) A method according to claim 41, wherein said vector is a viral vector.

45. (previously presented) A method according to claim 44, wherein said viral based vector is a hybrid viral vector.

46. (previously amended) A method according to claim 44, wherein said viral based vector is derived from a virus selected from the group consisting

of adenovirus; retrovirus; adeno associated virus; herpes virus; lenti virus, and baculovirus.

47. (previously amended) A method according to claim 41, wherein said promoter is selected from the group consisting of TRP-1; HER2; HER3; ERBB2; ERBB3; CEA; MUC1; α-fetoprotein; Rous sarcoma virus long terminal repeat; cytomegalovirus promoter; murine leukemia long terminal repeat; simian virus 40 early and late promoters; herpes simplex virus thymidine kinase promoter; prostate specific antigen promoter (PSA); villin gene promoter; pancreatic amylase promoter; tyrosinase related peptide promoter, and tumor rejection antigen precursor promoters.

48. (previously amended) A method according to claim 41, wherein said promoter is a hybrid promoter.

49. (previously presented) A method according to claim 41, wherein said promoter is a tumor-specific promoter.

50. (previously presented) A method according to claim 49, wherein said tumor-specific promoter is selected from the group consisting of TRP-1; HER2; HER3; ERBB2; ERBB3; CEA; MUC1; α-fetoprotein; pancreatic amylase promoter; tyrosinase related peptide promoter, and tumor rejection antigen precursor promoters.

51. (previously presented) A method according to claim 41, wherein said promoter is a constitutive promoter.

52. (previously presented) A method according to claim 51, wherein said constitutive promoter is selected from the group consisting of villin gene

promoter; Rous sarcoma virus long terminal repeat; cytomegalovirus promoter; murine leukemia long terminal repeat; simian virus 40 early and late promoters; and herpes simplex virus thymidine kinase promoter.

53. (previously presented) A method according to claim 41, wherein said gene encoding a polypeptide having P450 activity is of mammalian origin.

54. (previously presented) A method according to claim 53, wherein said gene encoding a polypeptide having P450 activity is of human origin.

55. (previously presented) A method according to claim 54, wherein said gene encoding a polypeptide having P450 activity is selected from the group consisting of CYP1A2; CYP2E1, and CYP3A4.

56. (previously presented) A method according to Claim 55, wherein the gene encoding a polypeptide having P450 activity is CYP1A2.

57. (previously presented) A method according to claim 53, wherein said gene encoding a polypeptide having P450 activity is of rodent origin.

58. (previously presented) A method according to claim 57, wherein said gene encoding a polypeptide having P450 activity is selected from the group consisting of rodent CYP1A2; rodent CYP2E1, and rodent CYP3A4.

59. (previously presented) A method according to claim 41, wherein said cancer is selected from the group consisting of breast; pancreatic; ovarian; cervical; lung; hepatic; renal; testicular; prostate; gastrointestinal; glioma; melanoma; bladder; lymphoma; leukemia; epithelial, mesothelial, and retinal cancers.

60. (previously presented) A method of treating cancer comprising administering to a mammal, concurrently or in sequence, an effective amount of:

i) at least one vector, capable of transfecting at least one tumor cell, wherein said vector includes at least one P450 gene, or the effective part thereof, the expression of which is controlled by a promoter sequence, or the effective part thereof, which shows substantially tumor cell specific expression;

ii) at least one agent capable of modulating the amount of glutathione in said mammal; and

iii) acetaminophen.

61. (previously amended) The method of claim 60, wherein the vector, agent and acetaminophen are administered sequentially.

62. (previously presented) A method according to claim 60, wherein said agent is at least one substance selected from the group consisting of methionine and acetylcysteine.

63. (previously amended) A composition of matter comprising acetaminophen, or a structurally related derivative thereof; and a vector comprising a polynucleotide encoding a polypeptide having a P450 activity of converting acetaminophen to a cytotoxic molecule, wherein the expression of the polypeptide is controlled by a promoter sequence, or an effective part thereof.

64. (previously amended) A composition according to Claim 63, wherein the promoter shows substantially tumor cell specific expression.

65. (previously presented) A composition according to Claim 63, wherein the vector is a eukaryotic expression vector.

66. (previously amended) A composition according to Claim 63, wherein the vector is a viral vector.

67. (previously presented) A composition according to Claim 64, wherein the vector is a hybrid viral vector.

68. (previously amended) A composition according to Claim 66, wherein the viral vector is based on a virus selected from the group consisting of adenovirus; retrovirus; adeno-associated virus; herpesvirus; lentivirus; and baculovirus.

69. (previously amended) A composition according to Claim 63, wherein said promoter is selected from the group consisting of TRP-1; HER2; HER3; ERBB2; ERBB3; CEA; MUC1; α-fetoprotein; Rous sarcoma virus long terminal repeat; cytomegalovirus promoter; murine leukemia long terminal repeat; simian virus 40 early and late promoters; herpes simplex virus thymidine kinase promoter; prostate specific antigen promoter (PSA); villin gene promoter; pancreatic amylase promoter; tyrosinase related peptide promoter, and tumor rejection antigen precursor promoters.

70. (previously amended) A composition according to Claim 63, wherein said promoter is a hybrid promoter.

71. (previously presented) A composition according to Claim 63, wherein said promoter is a tumor-specific promoter.

72. (previously amended) A composition according to Claim 71, wherein said tumor-specific promoter is selected from the group consisting of TRP-1; HER2; HER3; ERBB2; ERBB3; CEA; MUC1; α-fetoprotein; pancreatic

amylase promoter; tyrosinase related peptide promoter, and tumor rejection antigen precursor promoters.

73. (previously presented) A composition according to Claim 63, wherein said promoter is a constitutive promoter.

74. (previously presented) A composition according to Claim 73, wherein said constitutive promoter is selected from the group consisting of villin gene promoter; Rous sarcoma virus long terminal repeat; cytomegalovirus promoter; murine leukemia long terminal repeat; simian virus 40 early and late promoters; and herpes simplex virus thymidine kinase promoter.

75. (previously amended) A composition according to Claim 63, wherein the polynucleotide encoding a polypeptide having a P450 activity is of mammalian origin.

76. (previously amended) A composition according to Claim 75, wherein the polynucleotide is of human origin.

77. (previously amended) A composition according to Claim 76, wherein the polynucleotide is selected from the group consisting of CYP1A2; CYP2E1, and CYP3A4.

78. (previously amended) A composition according to Claim 77, wherein the polynucleotide is CYP1A2.

79. (previously amended) A composition according to Claim 63, wherein the polynucleotide is of rodent origin.

80. (previously amended) A composition according to Claim 79, wherein the polynucleotide is selected from the group consisting of rodent CYP1A2; rodent CYP2E-1; and rodent CYP3A4.

81. (previously presented) A composition according to Claim 63, further comprising at least one agent capable of modulating glutathione level in a mammal.

82. (previously presented) A composition according to Claim 81, wherein the agent is methionine or acetylcysteine.

83. (cancelled).

84. (previously presented) A composition according to claim 82, further comprising a pharmaceutically acceptable excipient, carrier or diluent.

85. (previously amended) A method for selectively killing cells in a mammal, the method comprising administering to the mammal, concurrently or in sequence, an effective amount of

i) at least one vector comprising a polynucleotide encoding a polypeptide having a P450 activity of converting acetaminophen to a cytotoxic molecule, wherein the expression of the polynucleotide is controlled by a promoter, or an effective part thereof, and

ii) acetaminophen,

wherein the acetaminophen is converted in the cells into NABQI and wherein said cells do not express a sufficient level of glutathione to detoxify the NABQI.

86. (new) A method according to Claim 57, wherein the mammal is a human, and wherein the method further comprising administering to the mammal an effective amount of furaphylline that inhibits the activity of human P450 in cells of the human.

87. (new) A method according to Claim 86, wherein the gene encoding a polypeptide having P450 activity is selected from the group consisting of rodent CYP1A2, rodent CYP2E1, and rodent CYP3A4.